

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-10 are pending in this application.

The outstanding Office Action includes a rejection of Claim 1-2 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Tarnay et al. (U.S. Patent No. 4,655,486, Tarnay) in view of Parmann (U.S. Patent No. 3,929,958) and a rejection of Claim 3, 4, and 6-10 under 35 U.S.C. § 103(a) as being unpatentable over Tarnay in view of Parmann and in further view of Flepp (U.S. Patent No. 6, 555,243).

Before considering the rejections made under 35 U.S.C. § 103(a), it is again believed that a brief review of the subject matter of base Claim 1 would be helpful. In this regard, this claimed subject matter is directed to a process for the bonding a plastics pipe to another plastics part by means of ultrasound welding that uses sound waves which act longitudinally with respect to the pipe axis, while the arrangement of the areas to be welded is substantially parallel to the pipe axis. This ultrasound welding is combined with the forced insertion of the other plastics part into the plastics pipe in such a way that the plastics pipe is widened while there is at least some overlap between the exposure to sound and the forced insertion. Note the last clause of Claim 1 requiring “forcing insertion of the coupling end portion into the plastics pipe so that the coupling end portion is inserted inside of and widens the plastics pipe during at least part of the time that the sound waves are being provided during the ultrasonic welding step.”

Turning to the rejection of Claims 1, 2, and 5 under 35 U.S.C. § 103(a) as being unpatentable over Tarnay in view of Parmann, it is first noted that this rejection, it is respectfully submitted that the outstanding rejection has failed to correctly analyze Tarnay’s suggestion as to ultrasonic welding for the connector parts 24 and 26. In this regard, Tarnay simply suggests that an undisclosed assembly technique that in some undisclosed manner

uses “ultrasonic welding” could be substituted for the snapping together of these parts (24 and 26) in the preferred embodiment as noted at col. 4, lines 15-27.

In contrast to the vague suggestion in Tarnay that some undisclosed “ultrasonic welding” technique could be substituted for the snapping together of the preferred embodiment, base independent Claim 1 is quite specific to the ultrasound welding technique required for the present invention. In this regard, there is clearly no teaching or suggestion to be found in Tarnay of the Claim 1 required use of “sound waves which act longitudinally with respect to a plastics pipe axis,” much less any teaching of the Claim 1 required “maintaining an arrangement of areas to be welded substantially parallel to the plastics pipe axis.”

Moreover, the last paragraph at the bottom of page 1 of the outstanding Action admits that there is no suggestion in Tarnay of the Claim 1 required “forcing insertion of the coupling end portion into the plastics pipe so that the coupling end portion is inserted inside of and widens the plastics pipe.” Thus, the outstanding Action turns to Parmann to teach such widening. However, the outstanding Action has ignored that in addition to this widening of the pipe by insertion of the coupling end, Claim 1 further requires that during this insertion and widening, there has to be “at least some part of the time that the sound waves are being provided during the ultrasonic welding step.”

In this last regard, the above-noted lack of any particulars in Tarnay as to the mere suggestion of ultrasonic welding extends to the complete lack of any suggestion that sound waves should be applied while the two members to be welded are being joined. In addition, Parmann includes no teachings or suggestions of any ultrasonic welding steps at all, much less that sound waves are to be present when the pipe end is shaped around the mold element and then caused to shrink by cooling as taught at col.5, lines 45-52.

Also, to whatever extent that Parmann teaches telescoped pipe sections at col. 1, lines 6-13, this is not relevant to the use of the mold element to form a socket at one pipe end that includes the widening of that pipe end noted in the teachings of col. 5, lines 23-65 that are relied on in the outstanding Action. See again the disclosure at col. 6, lines 41-44 of Parmann that teaches in detail how a pipe end 18 is formed into a socket having an annular internal groove for the reception of a sealing element. As was noted in the last response, col. 6, lines 45-64 teach that this socket formation involves the use of shape conferring elements including steel drift 1, annular separate mold element 2, and sleeve-shaped support member 3 that is axially displaceable on the steel drift member 1.

As further noted in the last response and again ignored in the outstanding Action, 11 is not a pipe section and that is part of the “snugly telescoped configuration of the pipe sections” mentioned at col. 1, lines 6-13. Instead, it is an edge surface of the support member 3 that is used with the mold 2 (see, e.g., col.7, lines 8-14) to form the socket end in one pipe section to be later “snugly telescoped” to another pipe section not having this socket end. However, as clearly set forth at col. 7, lines 8-11, the primary function of 11 is to ensure “an effective support for the mold element.” As further explained at col. 7, line 15 – col. 8, line 47, there is a two phase socket formation that widens the pipe end under heating and adds the annular internal groove with the mold element remaining in the socket to serve as a sealing element also mentioned at col. 5, lines 31-37 and lines 45-65.

Contrary to established precedent, the outstanding Action never addresses why the artisan would have even considered the pipe socket forming teachings of Parmann to be relevant to the ultrasonic welding together of connector members 24 and 26 of Tarnay that, when joined, serve to connect pipes under pressure. In this regard, the teachings of Tarnay have nothing to do with joining together pipes that are not under pressure by simply pushing

an insert end of one pipe section into the socket end of the next pipe section as described at col. 1, lines 53- 61 of Parmann.

As pointed out in the last response, when the references proposed by the PTO for combination have such clearly different teachings pointing to entirely different approaches, the PTO has been notified by its reviewing court that it must explain why the artisan would even select these disparate references for combination, as well as explaining fully the motivation that would suggest some reason to modify Tarnay based on the incompatible teachings of Parmann. Note again *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) and the requirement there for the PTO to “explain the reasons one of ordinary skill would have been motivated to select the references and to combine them to render the claimed invention obvious.”

For example, the PTO must explain why the artisan would consider modifying the suggested welding together of the two Tarnay connector parts by the pipe end socket formation teachings of Parmann. The advantage of having pipes not under pressure that can be joined together by inserting a straight end into a socket end to telescopically join the finished pipes relied upon in the outstanding Action would not appear to be relevant to why the artisan would look to the socket end forming teachings of Parmann.

As Claims 2 and 5-10 depend on Claim 1, the rejection of these claims that include all the subject matter of Claim 1 is also traversed for the above-noted reasons. In addition, each of these claims adds features clearly not taught by either reference. Note the “simultaneous” requirement of Claim 2 and the nature of the other plastics part recited by Claim 5. As neither of the applied references teaches these added features, Claims 2 and 5 clearly define over these references on this basis as well as because of their dependency on Claim 1.


Turning to the rejection of Claim 3, 4, and 6-10 under 35 U.S.C. § 103(a) as being unpatentable over Tarnay in view of Parmann and in further view of Flepp, it is noted that

Flepp cures none of the deficiencies noted above as to Tarnay and Parmann. As each of Claims 3, 4, and 6-10 ultimately depends on Claim 1, the rejection of these claims that include all the subject matter of Claim 1 is traversed for the above-noted reasons. In addition, each of these claims adds features clearly not taught by these applied references and clearly define over these references on this basis as well as because of their dependency on Claim 1.

As no further issues are believed to remain outstanding in the present application, it is believed that this application is clearly in condition for formal allowance and an early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

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